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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,455	04/12/2004	James D. Cook	MTEZ 2 00035-1	2908

7590 08/09/2005

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EXAMINER

SINGH, SUNIL

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,455

Applicant(s)

COOK, JAMES D.

Examiner

Sunil Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33,43,46 and 49-70 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 33,43,46 and 49-70 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 33,43,46,49, 51-57, 60,62-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Ernst et al. (US 5816759).

Ernst et al. discloses a bolt and anchor assembly comprising an elongated bolt (20,22), a shell (30), expansion member (40), a support device (shell support) (29), engagement between said support device and said shell sequentially forces said shell into said expansion member to expand said shell to anchor said elongated in said associated bore hole (see col. 4 line 60+, col. 5 lines 1-16, col. 7 lines 1-10) and then allows axial movement of said support device in a direction toward and relative to said shell (see abstract, col. 4 lines 10-50, col. 7 line 5+). Base ring (32,33), fingers (35). Tapered surfaces (28,23, see Fig. 4) for both the support device and shell. Notch (36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 50,59,70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ernst et al..

Ernst et al. discloses the invention substantially as claimed. However, Ernst et al. is silent about the support device being threadedly received on the bolt. The examiner takes official notice that support device being threadedly received on a bolt is old and well known. It would have been considered obvious to one of ordinary skill in the art to modify Ernst et al. by making the support device threadedly received on the bolt since such modification is well known and old and since this facilitate the installment of the support device.

4. Claims 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ernst et al..

Ernst et al. discloses the invention substantially as claimed. However, Ernst et al. is silent about at what force does the support move relative to the shell. It would have been considered obvious to one of ordinary skill in the art to modify Ernst et al. by making the support device move relative to the shell at about 5,000lbs since this is a mere design choice.

5. Claims 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ernst et al..

Ernst et al. discloses the invention substantially as claimed. However, Ernst et al. is silent about the support having an antifriction coating. The examiner takes official

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notice that support having antifriction coating is old and well known in the art. It would have been considered obvious to one of ordinary skill in the art to modify Ernst et al. by making the support device with an antifriction coating since this enables the relative movement between the support and the shell.

Response to Arguments

6. Applicant's arguments filed 5/19/05 have been fully considered but they are not persuasive. Applicant argues that Ernst et al. fails to teach for the engagement between the support device and the shell to sequentially force the shell into an expansion member to expand the shell to anchor the bolt while the support device remains axially fixed relative to the shell and then anchoring the bolt in the bore hole allows axial movement of the support device in a direction toward and relative to the shell.

The examiner disagrees. Firstly, as stated in Ernst et al. cols. 4, 5 and 7, the shell lower portion (34) is expanded before the upper portion (32) and depending on the size of the borehole at this juncture the shell lower portion (34) would anchor the bolt while the support device (29) remains axial fixed relative to the shell (see Fig. 1) and then anchoring the bolt in the bore hole allows axial movement of the support device in a direction toward and relative to the shell (see col. 7 and Fig. 4). Secondly, claims 33, 43 and 49 are directed to apparatus claims wherein the structure called for in such claims, namely, a bolt (20,22), shell (30), expansion member (40) and support device (29) are met by Ernst et al; a recitation of the intended use or method steps of the claimed invention must result in a structural difference between the claimed invention

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and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Applicant argues that the shell support of Ernst et al. do not move axially relative to the expansion shell when the bolt is tensioned after engagement to the rock formation. This is not true since such limitation is dependent on the size of the borehole. For example, at Ernst et al. cols. 4, 5 and 7, the shell lower portion (34) is expanded before the upper portion (32) and depending on the size of the borehole at this juncture the shell lower portion (34) would anchor the bolt while the support device (29) remains axial fixed relative to the shell (see Fig. 1) and then anchoring the bolt in the bore hole allows axial movement of the support device in a direction toward and relative to the shell (see col. 7 and Fig. 4).

Applicant's argument with regards to claim 70 is moot in view of new grounds of rejection.

With regards to claim 46, applicant argues that Ernst et al. do not meet the method steps. The examiner disagrees, since as stated in Ernst et al. cols. 4, 5 and 7, the shell lower portion (34) is expanded before the upper portion (32) and depending on the size of the borehole at this juncture the shell lower portion (34) would anchor the bolt while the support device (29) remains axial fixed relative to the shell (see Fig. 1) and then

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anchoring the bolt in the bore hole allows axial movement of the support device in a direction toward and relative to the shell (see col. 7 and Fig. 4). With regards to applicant's argument that the shell support of Ernst et al. do not move axially relative to the expansion shell when the bolt is tensioned after engagement to the rock formation. This is not true since such limitation is dependent on the size of the borehole. For example, at Ernst et al. cols. 4, 5 and 7, the shell lower portion (34) is expanded before the upper portion (32) and depending on the size of the borehole at this juncture the shell lower portion (34) would anchor the bolt while the support device (29) remains axial fixed relative to the shell (see Fig. 1) and then anchoring the bolt in the bore hole allows axial movement of the support device in a direction toward and relative to the shell (see col. 7 and Fig. 4).

With regards to claim 49, applicant argues that the shell support of Ernst et al. do not move axially relative to the expansion shell when the bolt is tensioned after engagement to the rock formation. This is not true since such limitation is dependent on the size of the borehole. For example, at Ernst et al. cols. 4, 5 and 7, the shell lower portion (34) is expanded before the upper portion (32) and depending on the size of the borehole at this juncture the shell lower portion (34) would anchor the bolt while the support device (29) remains axial fixed relative to the shell (see Fig. 1) and then anchoring the bolt in the bore hole allows axial movement of the support device in a direction toward and relative to the shell (see col. 7 and Fig. 4).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

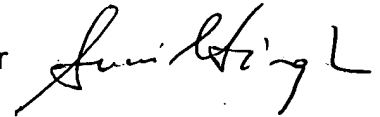
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sunil Singh
Primary Examiner
Art Unit 3673



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8/3/05